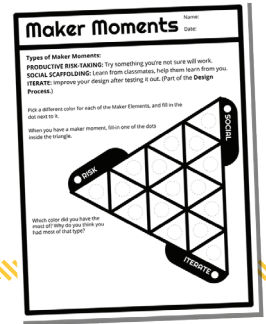# Maker Moments

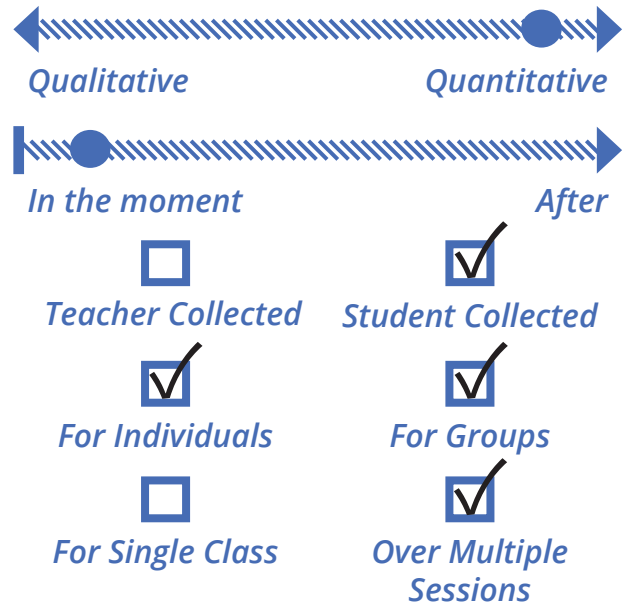*Quantify your meaningful maker moments.*

Overview

Maker Moments is a bingo-like card where students (or groups) capture quantitative evidence of their making process by marking a spot each time they demonstrate a particular Maker Element. The tool can be used by individual or groups of students, and can capture data for up to three different elements. It works best with indicators that are easily observable and quantified (Design Process: We improved our design based on testing. Productive Risk-taking: We tried something without knowing what would happen.) The tool builds students' ability to recognize behaviors associated with the Maker Elements and gives a snapshot of behaviors from each day over the course of a day, week, or project. At the end of a week or project, the data can be graphed or discussed, and changes over time noticed.

Evidence Collection

Qualitative ←———————● → Quantitative

In the moment ←——●———————→ After

☐ Teacher Collected ☑ Student Collected

☑ For Individuals ☑ For Groups

☐ For Single Class ☑ Over Multiple Sessions

Well Suited For

- This tool works best if it will be used multiple times. This could be daily over the course of a multiple day project, or multiple times over the course of a semester or year as it may take students multiple times to practice recognizing "maker moments."

- Projects that have opportunities for students to make design decisions and take risks, with options not entirely pre-determined.

Before Class

- Preparation Time: 15 minutes
- Materials: Copies of Maker Moments cards, markers or bingo blotters.

1. Select constructs to measure, and update the labels and descriptions on Maker Moments card.

2. Determine how you will ask students to make sense of the data at the end of the day. The template allows for a count of individual "moments" or a reflection question.

3. Print out Maker Moment cards for each student or groups.

During Class

1. Introduce how to use the tool at the beginning of class when using for the first time. Here are some tips to get you started:

   - Spend time defining what each of the Maker Elements on the card means. Help students come to a collective understanding. This includes brainstorming examples of type of moments students might document in the day's project (e.g. When you bring your tower over to the testing area to see how much weight it holds, add a dot to Design Process).

   - Have each student or group pick which color dot represents which element, and label them at the beginning. Explain that the dots should reflect the Maker Moments they experience, so they can have many dots or zero dots in a color. Their whole triangle may be a single color at the end of the session.

   - If implementing with groups, it can be helpful to have each group select a "moment marker" who is in charge of making sure moments are recorded.

2. Throughout the work period, remind students to document moments as they happen. This is sometimes forgotten as students are in the flow of their project.

3. At the end of class, have students answer the reflection question and/or count the number of each type of moment. This can be an opportunity to reflect on goals for the next day. "I did a lot of collaborating today, but not a lot of risk taking. I will try and do more of that tomorrow!"

4. At the end of a week or project, students can graph the data they have collected and reflect on their maker process over time.

Extend, Adapt, Remix!

This guide is just the start! We encourage you to adapt the tool to your context: use your own assessment constructs, adapt for your classroom routines and procedures, or co-design new versions with your students!

Here are a couple of ideas we've seen to get you thinking:

- Record the data into Google Sheets or Excel and have students create an infographic or other representation of their process over time.

- Take the mechanic and make it big! What if students added colored dots to a work smock or large Maker Moments card so the moments were a public display of their "risk-taking" or "collaborative" days.

- Add spots for students to annotate on the card what happened during the moments, to bring some qualitative data into the process.

We want to hear from you!

The Beyond Rubrics tools are a work in progress that we want to improve. If you try out a tool and you love it, please let us know! If you try it out and you find it frustrating, design a better version, or have specific feedback, let us know that, too!

For more information, visit our website or reach out!

Project Website: makered.org/beyondrubrics

On Twitter: @MakerEdOrg & @playfulMIT